

REMARKS

Claims 12-16 are pending. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Entry of this Amendment is respectfully requested since no new issues are raised by entry of the Amendment and it places the Application in condition for allowance or at least in better form for appeal.

Claim Rejections Under 35 U.S.C. § 102

Claims 12-14 were rejected under 35 U.S.C. § 102(b) over Yasukazu (JP 06-053206). Applicants respectfully traverse this rejection.

Claim 12 recites, a method for manufacturing a nano-gap electrode device that includes forming a first electrode on a substrate, forming a separation layer with a predetermined thickness all over the substrate including the first electrode, removing a portion or all of the separation layer on the first electrode, forming a second electrode on the separation layer, which is formed on the substrate at a side of the first electrode, and forming a nano-gap between the first electrode and the second electrode, by completely removing the separation layer remained therebetween.

In contrast, Yasukazu discloses a semiconductor with an operational gap that includes a fixed electrode 211, an oxide film 105, and a movable electrode 210. Although the Office Action alleges that Yasukazu teaches that the oxide film 105 is formed all over the substrate, as recited in claim 12, Applicants respectfully disagree. Yasukazu actually specifically teaches that the oxide film 105 is formed on the sidewall of a fixed electrode 211. See, for example, Abstract and Figure 1C. Yasukazu does not teach or even suggest forming the oxide film 105 all over the substrate. As a result, Yasukazu fails to teach or suggest, forming a second electrode on the separation layer, which is formed on the substrate at a side of the first electrode, as recited in claim 12. Instead, as shown in Figure 1D, Yasukazu teaches forming a polysilicon film 302 in between electrodes 211, but since there is no oxide film 105 present, the polysilicon film 302 is not formed on the separation layer, which is formed on the substrate at a side of the first electrode. As a result, Yasukazu can not achieve the structure shown in Figure 6E of Applicants' originally filed Application.

Claims 13 and 14 are believed allowable for at least the same reasons presented above with respect to claim 12 by virtue of their dependence upon claim 12. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim Rejections Under 35 U.S.C. § 103

Claims 15 and 16 were rejected under 35 U.S.C. § 103(a) over Yasukazu in view of Tsai et al. (U.S. Patent No. 6,781,160). Applicants respectfully traverse this rejection.

Claims 15 and 16 are believed allowable for at least the same reasons presented above with respect to claim 12 by virtue of their dependence upon claim 12 and because Tsai does not remedy the deficiencies of Jackson discussed above with respect to the features of claim 12. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.


Conclusion

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

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